Application	Applicable Mission (Sensors)	Example Product
Agriculture	Landsat-7, EOS AM-2 (LATI)	Crop health, crop yield predictions, snow cover, flood monitoring
	EOS AM (MODIS, MISR, ASTER, CERES)	Vegetation indices, land use change, land surface temperature, snow cover, improvement in climate models for surface temperature and precipitation forecasting, canopy photosynthesis and transpiration rates
	EOS PM (AMSR, AIRS/AMSU/MHS, MODIS, CERES)	Soil moisture, precipitation, improved weather forecasting, land surface temperature, snow cover, improvement in climate models for surface temperature and precipitation forecasting
	TRMM (PR, TMI, LIS)	Tropical and subtropical precipita- tion, soil moisture, improvement in climate models for surface tem- perature and precipitation fore- casting
Land Use Planning	Landsat-7, EOS AM-2 (LATI)	Biodiversity, regrowth and burning of forest areas, flood monitoring, input to geographic information systems (GIS)
	EOS AM (MODIS, ASTER, MISR)	Large area maps, mineral explora-

Application	Applicable Mission (Sensors)	Example Product
		tion, fire occurrence, flood moni- toring, soil type
Seismology	EOS AM (ASTER)	Changes in land surface, volcanology
Hydrology	Radar ALT (SSALT/AMR)	Sea surface topography, El Niño forecasting
	Laser ALT (GLAS)	Ice sheet topography and land ele- vation
	EOS AM-1 (MODIS, ASTER, MISR, CERES) EOS AM-2 (MODIS, LATI, CERES) TRMM (VIRS, CERES)	Cloud cover and properties, snow cover, surface temperature
	EOS PM (MODIS, CERES, AIRS/AMSU/MHS, AMSR)	Cloud cover and properties, snow cover, precipitation, soil moisture, surface temperature, sea (and lake) ice
	TRMM (PR, TMI, LIS)	Tropical and subtropical precipita- tion, soil moisture
Mapping	EOS AM-1 (ASTER, MISR) EOS AM-2 (MISR)	Digital Elevation Models (DEMs) from stereo imagery
	Laser ALT (GLAS)	Ice sheet and land elevation
National Security	Landsat-7, EOS AM-2 (LATI)	High spatial resolution mapping of specific locations, as demon- strated in desert storm

Application	Applicable Mission (Sensors)	Example Product
	EOS AM (MODIS, ASTER)	High spatial resolution images of land cover, cloud cover and properties, flood estimates, surface temperature, fire occurrence
	EOS PM (MODIS, AMSR)	Cloud cover, soil moisture, surface temperature, flood estimates, fire occurrence, sea (and lake) ice, surface wind fields over the ocean
	ADEOS II (SeaWinds)	Surface wind fields over the ocean
	EOS AM/PM (MODIS), EOS Chemistry (MLS), METEOR-3M/ISSA (SAGE III)	Volcano effects, sulfuric acid aero- sols affecting aircraft windows, dust affecting aircraft engines
Atmospheric Chemistry	EOS Chemistry (MLS, HIRDLS, ODUS, TES)	Stratospheric ozone and gases re- sponsible for regulating ozone, stratospheric temperature pro- files, tropospheric ozone, hy- droxyl radical (detergent of the atmosphere), upper tropospheric water vapor, CFCs in lower strato- sphere
	METEOR-3M/ISSA (SAGE III)	Ozone profiles, polar stratospheric clouds, upper tropospheric water vapor

Application	Applicable Mission (Sensors)	Example Product
	SAVE (SOLSTICE)	Solar ultraviolet radiation, impor- tant factor in regulating global ozone amount
	EOS AM (MOPITT)	Carbon monoxide and methane in the lower atmosphere
Marine Productivity	EOS AM/PM (MODIS) SeaStar (SeaWiFS)	Ocean color, productivity of ocean fisheries, sea surface temperature
	Radar ALT (SSALT/AMR)	Sea surface topography, circulation, El Niño forecasting
Education	All EOS Missions	Imagery and scientific analysis for school use and for educating the public on the global and regional environment